

**CALL NO. 08-01  
FOR PROFESSIONAL SERVICES  
TO BE PROVIDED TO THE  
CITY OF SANTA CLARA, CALIFORNIA  
BY GOLDER ASSOCIATES, INC.**

The Parties to this Call No. 08-01 ("Call") agree that on this \_\_\_\_\_ day of \_\_\_\_\_, 2008, this Call is made pursuant to the terms of a Call Agreement between the Parties entitled, "Call Agreement by and Between the City of Santa Clara, California and Golder Associates, Inc. for Postclosure Compliance, Monitoring, Operation and Maintenance Services for the Closed All Purpose Landfill" dated \_\_\_\_\_, 2008, the terms of which are incorporated by this reference. This Call describes the Services to be provided to the City of Santa Clara, California ("City") by Golder Associates, Inc. ("Contractor"), which are more fully described in Contractor's proposal to City entitled "Postclosure Compliance, Monitoring, Operation and Maintenance Services for the Former All Purpose Landfill, Santa Clara, California" dated September 1, 2008 ("Proposal"), attached to this Call as Exhibit A and incorporated by this reference. The Services to be performed under this Call shall be completed within the time period beginning on October 1, 2008, and ending on October 1, 2011. The attached Proposal contains a complete description of the Services, and performance dates for the completion of such Services, to be performed by the Contractor under this Call. In no event shall the amount paid to the Contractor for the Services provided to City by the Contractor under this Call, including all fees or pre-approved costs and/or expenses, exceed seven hundred-forty eight thousand-seven hundred-seventy dollars (\$748,770.00), subject to budgetary appropriations.

The Parties acknowledge and accept the terms and conditions of this Call as evidenced by the following signatures of their duly authorized representatives.

**CITY OF SANTA CLARA, CALIFORNIA,  
a chartered California municipal corporation**

Approved as to Form:

\_\_\_\_\_  
HELENE L. LEICHTER  
City Attorney

Attest:

\_\_\_\_\_  
ROD DIRIDON, JR.  
City Clerk

By: \_\_\_\_\_

JENNIFER SPARACINO  
City Manager

1500 Warburton Avenue  
Santa Clara, CA 95050  
Telephone: (408) 615-2210  
Fax: (408) 241-6771

**GOLDER ASSOCIATES, INC.  
a Georgia corporation**

By: \_\_\_\_\_

RICHARD S. MERRILL  
Senior Consultant

By: \_\_\_\_\_

ANDREW P. WANG, P.E.  
Senior Engineer

Address: 425 Lakeside Drive  
Sunnyvale, CA 94085  
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"Contractor"

**Golder Associates Inc.**  
425 Lakeside Drive  
Sunnyvale, CA USA 94085  
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www.golder.com



September 1, 2008

P83-97352

Mr. Richard J. Mauck  
Director of Street & Automotive Services  
City of Santa Clara  
1500 Warburton Avenue  
Santa Clara, California 95050

Re: Postclosure Compliance, Monitoring, Operation and Maintenance Services for the  
former All Purpose Landfill, Santa Clara, California

Dear Mr. Mauck:

At your request, Golder Associates Inc. (Golder) has prepared this scope of work and cost estimate to provide landfill postclosure monitoring, compliance, operation and maintenance services for the City of Santa Clara (City) All Purpose Landfill (Landfill), in accordance with the applicable City Call Agreement (Agreement), and Calls and Purchase Orders authorized by the City under this Agreement.

## **PROJECT UNDERSTANDING**

The former All Purpose Landfill has been formally closed since 1993. Significant areas of the Landfill are currently used as a public golf course and a bicycle motocross track facility. The major existing Landfill postclosure environmental systems and processes include the following:

- Landfill gas (LFG) collection and control system (GCCS) with blower/flare station, condensate pumping system, and compressed air supply;
- Groundwater monitoring well and leachate sump system;
- Low permeability landfill containment (final cover, clay liner, perimeter barrier walls).

To facilitate task tracking and project management the following scope of work has been categorized into three routine phases for the major environmental systems and one miscellaneous phase for unforeseen non-routine or emergency work. Additional site systems proposed to be completed by others within the contract period include a leachate sump pumping system and a LFG-to-energy power plant. Because the additional routine work responsibilities due to these new systems are anticipated to be relatively minor with respect to the overall work scope, they have been included within the existing phase and task descriptions.

## **SCOPE OF WORK**

### **Phase 1 - LFG Monitoring and Air Quality Compliance**

Under this phase, Golder proposes to perform the routine air quality and LFG tasks required for site regulatory compliance. The landfill is currently subject to the New Source Performance Standards/Emissions Guideline (NSPS/EG) and is operating under a Title V permit issued by the Bay Area Air Quality Management District (BAAQMD). An application for a synthetic minor operating

permit (SMOP) has been submitted by others. Should this application be approved, the site would no longer be subject to the NSPS/EG and would operate according to the provisions of the SMOP which would include the monitoring requirements of BAAQMD Rule 8-34. Since the requirements of the NSPS/EG mirror the requirements of BAAQMD Rule 8-34 to a large extent, the scope of work for the monitoring tasks will not be substantially affected by SMOP.

- **Task 1A – Quarterly Emissions Monitoring:** Surface Emissions Monitoring (SEM), GCCS Component Leak Monitoring, and LFG migration probe monitoring will be conducted in accordance with the NSPS/EG (if applicable), BAAQMD and CIWMB regulations, and the approved GCCS Design Plan. This task includes initial monitoring, City notification of exceedances, follow-up monitoring, preparing and submitting regulatory reports, and maintaining on-site compliance records.

Golder proposes to monitor the perimeter LFG migration probes quarterly, in accordance with CIWMB regulations. Monitoring activities will include testing and recording methane concentrations and soil gas pressures for each probe using a Landtec GEM2000 or equivalent instrument. Site conditions will be recorded as required. Routine reporting of migration monitoring results to the Local Enforcement Agency (LEA) will be provided in conjunction with the quarterly air compliance reporting. Reporting of methane migration exceedances, remediation work plans and corrective action implementation are not anticipated, and would be provided under non-routine services.

- **Task 1B – Monthly Monitoring:** Monthly wellhead sampling for methane, oxygen, temperature and vacuum will be performed using a Landtec GEM2000 or equivalent instrument, according to the requirements of BAAQMD Rule 8-34. In conjunction with the wellhead monitoring, the Golder technician will conduct routine landfill cover inspection. This task includes conducting initial monitoring, corrective action, and follow-up monitoring, and recommending mitigation measures for cover integrity issues and persistent wellhead exceedances. Collected data will be downloaded to a data management system or transmitted electronically to a City-designated location.

Golder will routinely monitor and adjust all LFG extraction wells a minimum of once each month. Wells that require more frequent adjustments will be monitored and adjusted on an as-needed basis. During this monthly wellhead monitoring task, Golder will also provide routine adjustments of the GCCS targeting the specifications of the proposed LFG energy project, as mutually agreed to by the City and the energy project operator. If the total number of site GCCS monitoring visits (including those for initial plant start-up coordination or well-field re-balancing to meet LFG energy project specifications) exceeds the number allocated for routine services, extra site visits will be charged as non-routine services.

- **Task 1C –Flare Emission Monitoring:** The Title V Major Facility Permit requires quarterly hydrogen sulfide sampling, annual control device emission source testing, control device temperature and total flow documentation, and Start-up/Shut-down/Malfunction (SSM) tracking. It is anticipated that the SMOP will include the same requirements with the possible exception of the SSM tracking. Golder will conduct the required sampling, prepare and submit the required reports, and maintain the necessary documentation of the activities.

Golder assumes that the LFG energy plant operator will monitor and track fuel delivery parameters at the point-of-sale. Additional or new LFG verification monitoring or analysis for energy plant parameters will be performed as additional non-routine services.

- **Task 1D – Monthly Data Review and Reporting:** The Golder compliance specialist will compile and review of all required control device operation, air quality, and LFG compliance data for submittal in monthly reports to the City. Data will be reviewed to assure that all necessary compliance requirements are being addressed and completed in a timely manner. Golder will notify the City immediately upon finding any condition or data with potential for non-compliance, including GCCS parameters and exceedances, cover deficiencies and areas of concern.

Monthly reports will be submitted to the City within 25 days following the end of each month. The monthly reports will constitute Golder's primary entries into the required BAAQMD Site Operating Record, with field records and instrumentation output charts maintained as secondary back-up information. These reports will summarize all LFG and air monitoring, O&M, and compliance activities performed during the month and present collected data in a tabular format. Collected data will be checked against regulatory standards for compliance. Recommendations will be made for data that are out of compliance to ensure progress towards compliance is being achieved.

- **Task 1E – Regulatory Compliance Reports and Annual Compliance Certification:** Semi-annual reports detailing compliance with the Title V permit are required as long as the Title V permit is in effect. After the SMOP is issued, a single annual report supporting BAAQMD Rule 8-34 compliance will be required. Golder will prepare the required reports based on the information collected during routine monitoring events and compiled in the monthly internal reports. Draft reports will be submitted timely to the City, for their review, approval, and signature, before submittal to the regulatory agencies by the required deadlines.
- **Task 1F – Annual Compliance Certification:** The Title V permit requires preparation of an annual compliance certification (to be signed by the responsible City manager), listing the compliance status of the facility with respect to each applicable air requirement. Under this task Golder will prepare and submit these compliance listings, as necessary. The compliance certification may not be required after the SMOP is issued.

## **Phase 2 - Water Quality Compliance**

Semiannual and annual water-quality monitoring and reporting for the Santa Clara/All Purpose Landfill will be performed consistent with the self-monitoring program contained in Waste Discharge Requirements Order No. R2 2002-0008 (WDR). The San Jose/Santa Clara Water Pollution Control Plant also requires quarterly leachate monitoring in the City's Industrial Wastewater Discharge Permit No. SC-235A.

- **Task 2A – Semi-annual Monitoring and Analysis:** The elements of the semi-annual water quality detection monitoring include:

- Coordination of periodic extraction of leachate from the LCRS sump LR-1 with a vacuum truck and discharge to the sanitary sewer at sanitary sewer manhole. The volume discharged will be included in the semiannual reports.
- Quarterly monitoring of the leachate for zinc and pH from the leachate discharged at LR-1 for compliance with Industrial Wastewater Discharge Permit No. SC-235A and for the routine parameters identified in the WDR.
- Semiannual groundwater monitoring from eighteen active groundwater monitoring wells (G-1, G-2R, G-3R, G-4R, G-5, G-10, G-11, G-12, G-13, G-14, G 15, G 17, G-18, G-19, G-21, and H-5, H-6, and H-7).
- Semiannual surface water monitoring from upstream and downstream locations relative to the landfill in San Tomas Aquino Creek (SW-1 and SW-2, respectively) and the eastside drainage channel (SW-3 and SW-4, respectively).
- Semiannual liquid level measuring in 22 groundwater wells or piezometers and six leachate piezometers (L-1 through L-6).

Golder will also inspect the leachate management facilities, surface water impoundment and perimeter diversion channels during the semiannual sampling events and at one other time during the intervening quarters.

#### **Sampling and Analysis Procedures**

Prior to initiating sampling at the landfill, the laboratory will be contacted for delivery of appropriate sample containers and chain of custody forms. Sufficient time will be allotted to allow for the timely delivery of these materials.

For each sampling medium, sampling will occur within the required 30-day time limit. Fluid levels will be measured in each monitoring well before samples are collected.

Sample collection and storage will be performed as specified in EPA SW-846. Groundwater wells will be purged before sample collection; leachate and surface water will be collected as grab samples. Groundwater samples will be field filtered for metals analyses; leachate and surface water will be unfiltered.

Semiannual groundwater, surface water, and leachate samples will be analyzed for the following suite of parameters; sampling will include two field blanks and one trip blank for VOCs:

- VOCs, including BTEX and MTBE
- Metals (arsenic, chromium, copper, iron, lead, nickel, and zinc)
- General minerals (chloride, pH, electric conductivity, total Kjeldahl nitrogen, nitrate plus nitrite as nitrogen, ammonia as nitrogen, chemical oxygen demand, total phenols)

Samples will be transported or shipped to the laboratory with appropriate chain of custody for the specified analyses.

## Reporting

The monitoring results submittals to the Regional Water Quality Control Board will consist of two semiannual monitoring reports. The semiannual monitoring reports will contain text, tables, and graphs of the water-quality data, groundwater contour maps, calculations of the groundwater velocity beneath the site, and facilities monitoring inspection summaries. Typical tasks in the routine monitoring report preparation are:

- Coordinating with contracted laboratory to obtain sample analytical results;
- Evaluation of preliminary sample data to identify samples to be re-evaluated prior to the expiration of applicable holding time;
- Evaluation of final laboratory results to confirm analysis results;
- Maintenance of existing test results databases and flow models;
- Preparation of groundwater contour maps and calculation of velocity;
- Development of draft monitoring report text, tables, and figures;
- Creation of site conditions report figures using a CAD format;
- Inclusion of appendices containing any reporting requirements provided by others; and
- Production and delivery of reports.

Draft reports will be submitted for review at least 10 working days prior to the reporting deadlines. In addition to the results from this scope of work, monitoring reports will include information provided by others: copies of the site inspection records, leachate extraction data, landfill gas monitoring and extraction data, storm water monitoring, and other required landfill data. The City-approved semiannual reports will be transmitted to the Regional Water Quality Control Board in both hard-copy and electronic formats, and entered into the state Geotracker system, as required. Reports for submittal to the San Jose/Santa Clara Water Pollution Control Plant to fulfill their reporting requirements have been prepared by City staff in the past, and are not included in this scope.

- **Task 2B – 5 Year Monitoring and Analysis:** Included in the WDR monitoring list is a 5-year analytical requirement for Subtitle D, Appendix II parameters for groundwater, surface water, and leachate. This five-year requirement began with the reporting period ending March 31, 1996. Therefore, the Appendix II parameters should be analyzed during this contract term, in 2011. The cost for the 5-year water quality analysis is shown separately in the Proposal Cost Estimate.

## Phase 3 – LFG and Leachate Operation and Maintenance

- **Task 3A – Routine Monthly O&M:** During and after the routine monitoring visits included in Phase 1, Golder will also perform minor maintenance on LFG collection components (e.g., replacing damaged/worn above ground flexhoses, monitoring ports, or control valves). Golder has assumed one 8-hour day per month for routine O&M. Materials/supplies utilized for minor maintenance will be obtained from an existing on-

site spare parts inventory maintained by the City of Santa Clara. Golder will assist the City in maintaining this inventory of spare parts. Wellfield O&M activities and non-routine maintenance and repair recommendations will be summarized in the internal monthly reports included in Phase 1.

Golder will also perform monthly inspection of the proposed leachate pump system at sump LR-1 during the routine O&M visits. Inspection will include recording flow meter, water level and discharge pressure readings to verify normal equipment operation. The leachate discharge flow quantities will be provided to the City for inclusion in the quarterly discharge permit report. Cleaning and overhaul frequency varies widely for leachate pump installations, depending on total operating time and leachate quality. Based on the relatively low leachate flows historically removed from sump LR-1, Golder has initially assumed an annual pump removal frequency for inspection and cleaning. We anticipate that the initial start-up testing and operational adjustment of the new leachate pump might require four to six site visits over a one-month period. These visits would be coordinated with routine scheduled site visits as much as possible, but non-routine visits may also be required.

- **Task 3B – Routine Weekly Flare Station and Condensate System O&M:** Once each week, Golder proposes to check the GCCS system equipment to confirm proper and efficient operation. Equipment operation to be verified includes LFG flare and blower, pilot fuel supply, automatic LFG valve, data recorders and remote alarms, air supply compressors, and condensate sump pumps. Pumps and controllers will be inspected and maintained in accordance with current industry practices or the manufacturer's specifications. Equipment requiring more frequent attention will be monitored and maintained as-needed on a non-routine basis, until permanent repair or replacement is completed. Infrequent events, such as flow meter recalibration, will be performed as a non-routine service.

Golder proposes to download the flare station data recorder on each weekly visit, to confirm that the operational parameters are within normal ranges and should remain in compliance with permit conditions. Flare continuous parameter compliance will be reported with the routine air quality compliance reporting in Phase 1. The flare controls are set to automatically shut down and transmit an alarm notification, in the case of any significant deviation of a continuous compliance parameter, at which time Golder staff will respond as a non-routine service. Golder assumes that all LFG energy plant equipment will be operated by others, and has not included any costs for O&M services that may be needed to accommodate or coordinate with this equipment.

#### **Phase 4 – Miscellaneous Landfill Postclosure Compliance Services**

- **Task 4A - Non-Routine Maintenance and Repairs:** Non-routine activities include specific pre-scheduled work tasks aimed at maintaining regulatory compliance or improving environmental control system performance or efficiency. These work tasks will be developed based upon the results of routine system inspections and report recommendations conveyed to the City. In addition, site monitoring and O&M visits in excess of the number of routine daily visits allocated per month (typically six to ten, depending on the scheduled regulatory monitoring requirements) will be considered non-routine services. Golder has assumed six non-routine site repairs requiring an

average technician time of 12 hours per repair. Non-routine work tasks will be reviewed and prioritized jointly by the City and Golder. Golder will undertake these work efforts only after obtaining an authorized task budget and notice to proceed from the City. Examples of specific work tasks that could be performed under this category include, but are not limited to:

- Replacement or upgrade of site monitoring facilities, instrumentation, or procedures
  - Replacement or upgrade of site environmental control equipment or facilities, including landfill final cover
  - Investigation and characterization of deviations in the site or compliance data, including slope failures, air leakage or intrusion, high temperatures, or potential subsurface combustion.
  - Rule, permit, and variance compliance negotiations with regulatory agencies
  - Permit applications for modified or new facilities or equipment
  - Notifications to regulatory agencies for breakdowns or abnormal operations
- **Task 4B - Emergency Services:** Golder will provide emergency response services for Landfill environmental control system malfunctions during the proposed contract period of work. Golder will respond to these situations seven (7) days a week, 365 days a year within a period of eight (8) hours from the time of notification of the problem by authorized City personnel or a recognized automatic call-out device. Golder will work with City personnel to implement effective system-specific call-out and contact procedures. Golder has assumed six emergency site visits requiring 4-hours each. The non-routine and emergency services required under this proposal will be performed on an as-needed basis in accordance with Golder's standard Schedule of Charges, for the current year. Applicable overtime premiums may be charged for off-hours labor provided on an emergency call-out basis.

#### **BUDGET ESTIMATE**

The total estimated cost for performing the proposed services over a 3-year contract term is summarized in the following table. The estimated annual budgets (2008-09) for each major phase of work and for the supplemental 5-year water analyses are also shown. A more detailed cost estimate of annual hours and expenses is also attached. Project, phase, task administration and management labor are included in the phase costs. Golder will bill for time-and-materials consistent with our applicable Schedule of Charges, which is subject to annual updates. The 2008 Schedule of Charges is attached. Neither an inflation index nor a contingency has been included in these budget estimates.

These task descriptions and annual budgets are projected levels-of-effort based on information available to Golder at this time. The annual funding level for miscellaneous postclosure compliance services included in Phase 4 is based on past project experience. Actual budgets for additional, non-routine, and one-time services will be provided and approved on a time-and-materials cost reimbursable basis. Expenditures under Phase 4 will only be initiated with prior City authorization,

and can be tracked as separate work phases, at the City's request.

**ALL PURPOSE LANDFILL  
POSTCLOSURE COMPLIANCE, MONITORING, OPERATION AND MAINTENANCE  
PROPOSAL COST ESTIMATES**

Phases and Tasks	Annual Budget Estimate
Phase 1 - LFG Monitoring and Air Quality Compliance	\$101,463
Phase 2 - Water Quality Compliance	\$54,337
Phase 3 - LFG and Leachate O&M	\$35,827
Phase 4 - Miscellaneous Postclosure Compliance Services	\$51,963
<b>Total Postclosure Services Annual Budget</b>	<b>\$243,590</b>
Task 2B - 5-year Supplemental Water Analysis (in 2011)	\$15,000
<b>Total 3-Year Contract Budget</b>	<b>\$745,770</b>

**ASSUMPTIONS AND CLARIFICATIONS**

Due to the broad nature of services that may be provided under the Call Agreement, Golder has attached proposed modifications to the City's sample Call Agreement and states the following contract assumptions and clarifications, to provide fair and reasonable allocation of risk:

- **Section 5 - Qualifications of Contractor:** Golder intends to self-perform the proposed services to the greatest extent possible, but reserves the right to use qualified subcontractors or to decline to propose on a specific Call request, if internal resources are unavailable.
- **Section 6 - Suspension or Termination:** Golder reserves the right to withhold final work product delivery until paid in full.
- **Section 10 - Hold Harmless/Indemnification:** Golder requires that this section be narrowed to reflect a mutual negligence-only basis (as allowed by CA Civil Code 2782.8), also to exclude "volunteers and agents" (see suggested attached modification).
- **Section 13 - Ownership of Data and Information:** Golder requests that City acknowledge that future data usage is at City's own risk, and indemnify Golder from liability for purposes other than originally intended by Golder.
- **Section 14 - Confidentiality of Data and Material:** City and Golder must specifically identify any subject materials as confidential, and Golder reserves the right to disclose information if required to do so by law, court order, etc.

Mr. Richard J. Mauck  
City of Santa Clara

September 1, 2008

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- **Section 15 – Correction of Work:** Golder will correct incomplete, defective and inaccurate work product to the extent that such deficiencies arise only from our own negligence, errors or omissions.
- **Section 22 – Service Warranty:** Golder will agree to the Standard of Care, within limitations owing to schedule, financial, physical or other constraints applicable to the services. Golder will agree to correct defective work resulting only from negligently performed services, when requested within the first year of initial completion.

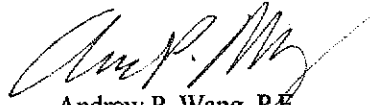
We sincerely appreciate the City's consideration in requesting our services, and look forward to continuing our positive working relationships. Please call if you have questions.

Best Regards,

Golder Associates Inc.



Richard S. Merrill  
Senior Consultant



Andrew P. Wang, P.E.  
Senior Engineer

Attachments: Proposal Cost Estimate  
2008 Schedule of Charges  
Golder Modifications to Sample Call Agreement

**Golder Associates Inc.**  
**Sunnyvale, California**  
**Professional Services Rate Schedule for Calendar Year 2008**

Invoices from Golder Associates Inc. include all labor charges, other direct costs, and costs associated with in-house services. Charges include only those services directly attributable to the execution of the work. Time spent when traveling in the interest of work will be charged in accordance with the hourly rates. An additional 50% will be added to the applicable labor rate for expert testimony, including time spent in depositions and the preparation and presentations of testimony.

Labor charges are based upon standard hourly billing rates for each category of staff. The billing rates include costs for salary, payroll taxes, insurance associated with employment, benefits (including holiday, sick leave, and vacation), administrative overheads, and profit. Rates by labor category are as follows:

<i>Personnel Level</i>	<i>Personnel Category</i>	<i>Hourly Rate (U.S. \$)</i>
LA1	Admin Support	\$65
LA2	Staff Admin Support	\$70
LA3	Senior Admin Support	\$75
LT1	Technician	\$70
LT2	Staff Technician	\$80
LT3	Senior Technician	\$90
LD1	Draftsperson	\$70
LD2	Staff Draftsperson	\$80
LD3	Senior Draftsperson	\$90
LV1	Engineer/Scientist	\$90
LV2	Staff Engineer/Scientist	\$100
LV3	Project Engineer/Scientist	\$120
LV4	Senior Project Engineer/Scientist	\$140
LV5	Senior Engineer/Scientist	\$165
LV6	Senior Consultant	\$190
LV7	Practice/Program Leader	\$220

Other direct costs, including materials, travel, subsistence, and subcontractor costs, will be invoiced at cost plus a minimum general and administrative fee of 15%.

Office Service Fee: Project non-labor office costs including telephone, fax transmissions, personal computers, and in-house photocopying will be billed at 6% of the total labor fees (this does not include large-volume copying by an external printing facility). This Office Service Fee does not include CAD computers, color photocopies, or drawing reproduction. These services will be billed at the following rates:

<i>SERVICE</i>	<i>RATE</i>
GIS/CAD Computers	\$20/hour
Color Photocopies	\$0.20/copy
Plotter (D & E sizes)	\$5 per sf <sup>1</sup>

1. In-house plots (color on paper); \$1/sf (B&W on paper)

Rates for laboratory services and use of equipment owned by Golder Associates Inc. will be provided upon request.

**City of Santa Clara - Former All Purpose Landfill**  
**Proposal Cost Estimate for Postclosure Monitoring, Compliance, Operations and Maintenance Services**  
**2008-2009 Annual Budget**

TASKS	Categories	Prin Consult LV7 \$220	Senior Consult LV6 \$190	Sr Engr LV5 \$165	Sr. Proj Engr LV4 \$140	Proj Engr/Geo LV3 \$120	Staff Engr/Geo LV2 \$100	Engr/Sr LV1 \$90	Sr. Tech LV3 \$90	Sr. Draft LD3 \$90	Staff Cler. LAI \$65	Subtotal Labor	Comm Fee 6%	Misc Exp. ODCs	Task Totals
1	LFG Monitoring and Air Quality Compliance	0	0	60	76	0	293	0	272	0	20	\$ 75,620	\$ 4,537	\$ 21,306	\$ 101,463
1A	Quarterly Monitoring			4	4		20		64			\$ 8,980	\$ 539	\$ 3,848	\$ 13,367
1B	Monthly Monitoring			12			24		192			\$ 21,660	\$ 1,300	\$ 4,996	\$ 27,956
1C	Emission Monitoring			2	16		4		16			\$ 4,410	\$ 265	\$ 12,212	\$ 16,887
1D	Monthly Data Review and Reporting														
1E	Regulatory Compliance Reports			12	24		180				12	\$ 24,120	\$ 1,447	\$ -	\$ 25,567
1F	Annual Compliance Certification			4	24		50				6	\$ 9,410	\$ 565	\$ 200	\$ 10,175
	Project Management			2	8		15				2	\$ 3,080	\$ 185	\$ 50	\$ 3,315
				24								\$ 3,960	\$ 238	\$ -	\$ 4,198
2	Water Quality Compliance	0	64	0	0	104	0	0	70	13	20	\$ 33,410	\$ 2,005	\$ 23,923	\$ 59,337
2A	Semi-annual Monitoring and Analysis		40			104			70	13	20	\$ 28,850	\$ 1,731	\$ 18,923	\$ 49,504
2B	5 Year Analysis (Pro-rated lab costs)		24									\$ -	\$ -	\$ 5,000	\$ 5,000
	Project Management											\$ 4,560	\$ 274	\$ -	\$ 4,834
3	Landfill Gas Operation and Maintenance	0	0	31	0	0	180	0	96	0	0	\$ 31,755	\$ 1,728	\$ 2,344	\$ 35,827
3A	Routine Monthly Wellfield O&M			6			24		96			\$ 12,030	\$ 722	\$ 1,848	\$ 14,600
3B	Routine Weekly O&M Inspection			13			156					\$ 17,745	\$ 887	\$ 496	\$ 19,129
	Project Management			12								\$ 1,980	\$ 119	\$ -	\$ 2,099
4	Non-routine Post Closure Compliance Services	0	0	18	24	0	72	0	120	0	0	\$ 24,330	\$ 1,217	\$ 26,416	\$ 51,963
4A	Non-routine Maintenance and Repairs			6	12		24		72			\$ 11,550	\$ 578	\$ 19,536	\$ 31,664
4B	Emergency Services			6	12		48		48			\$ 11,790	\$ 590	\$ 6,880	\$ 19,260
	Project Management			6								\$ 990	\$ 50	\$ -	\$ 1,040
Subtotal Costs:		\$ -	\$ 12,160	\$ 17,985	\$ 14,000	\$ 12,480	\$ 54,500	\$ -	\$ 50,220	\$ 1,170	\$ 2,600	\$ 165,115	\$ 9,486	\$ 73,989	\$ 248,590

Notes: (1) Communication expense will be billed at 6% of the labor costs and includes phone, facsimile, mail, overnight deliveries, and photocopies.  
(2) Other direct costs (ODCs) are detailed on page 2.

**City of Santa Clara - Former All Purpose Landfill**  
**Proposal Cost Estimate for Postclosure Monitoring, Compliance, Operations and Maintenance**  
**2008-2009 Direct Cost Detail Estimate**

TASKS	Company Vehicle	Fuel	Subcontract + Fees	Instrument Rental	Car Mileage	Misc	Task Totals
<b>1 LFG Monitoring and Air Quality Compliance</b>							
1A Quarterly Monitoring	\$ 3,900	\$ 156	\$ 12,800	\$ 3,900	\$ -	\$ 550	\$ 21,306
1B Monthly Monitoring	\$ 1,200	\$ 48	\$ 1,300	\$ 1,200		\$ 100	\$ 3,848
1C Emission Monitoring	\$ 2,400	\$ 96		\$ 2,400		\$ 100	\$ 4,996
1D Monthly Data Review and Reporting	\$ 300	\$ 12	\$ 11,500	\$ 300		\$ 100	\$ 12,212
1E Regulatory Compliance Reports							\$ -
1F Annual Compliance Certification						\$ 200	\$ 200
						\$ 50	\$ 50
<b>2 Water Quality Compliance</b>	\$ 800	\$ 40	\$ 20,000	\$ -	\$ 83	\$ 3,000	\$ 23,923
2A Semi-annual Monitoring and Analysis	\$ 800	\$ 40	\$ 15,000		\$ 83	\$ 3,000	\$ 18,923
2B 5 Year Analysis (Pro-rated lab costs)			\$ 5,000				\$ 5,000
<b>3 Landfill Gas Operation and Maintenance</b>							
3A Routine Monthly Wellfield O&M	\$ 1,200	\$ 48	\$ -	\$ -	\$ 346	\$ 750	\$ 2,344
3B Routine Weekly O&M Inspection	\$ 1,200	\$ 48				\$ 600	\$ 1,848
					\$ 346	\$ 150	\$ 496
<b>4 Non-routine Post Closure Compliance Services</b>	\$ 1,500	\$ 116	\$ 20,000	\$ 1,200	\$ -	\$ 3,600	\$ 26,416
4A Non-routine Maintenance and Repairs	\$ 900	\$ 36	\$ 15,000	\$ 600		\$ 3,000	\$ 19,536
4B Emergency Services	\$ 600	\$ 80	\$ 5,000	\$ 600		\$ 600	\$ 6,880
<b>Total direct costs:</b>	\$ 7,400	\$ 360	\$ 52,800	\$ 5,100	\$ 429	\$ 7,900	\$ 73,989

**CALIFORNIA JURAT WITH AFFIANT STATEMENT**

State of California

County of SANTA CLARA } ss.

- ☐ See Attached Document (Notary to cross out lines 1-6 below)  
☐ See Statement Below (Lines 1-5 to be completed only by document signer[s], *not* Notary)

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_  
5 \_\_\_\_\_  
6 Richard S. Merrill Signature of Document Signer No. 1  
7 Andrew Paul Wang Signature of Document Signer No. 2 (if any)

Subscribed and sworn to (or affirmed) before me on this

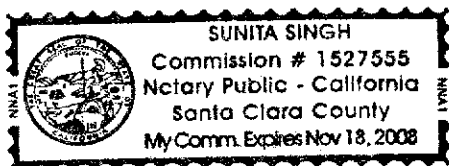
15<sup>th</sup> day of September, 2008, by  
Date Month Year

(1) Andrew Paul Wang  
Name of Signer

- ☐ Personally known to me  
☐ Proved to me on the basis of satisfactory evidence  
to be the person who appeared before me (.) (,)  
(and

(2) Richard Stanley Merrill  
Name of Signer

- ☐ Personally known to me  
☐ Proved to me on the basis of satisfactory evidence  
to be the person who appeared before me.)



[Signature]  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove  
valuable to persons relying on the document and could prevent  
fraudulent removal and reattachment of this form to another document.*

**Further Description of Any Attached Document**

Title or Type of Document: Call Agreement Call No  
08-01

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

RIGHT THUMBPRINT OF SIGNER #1
Top of thumb here

RIGHT THUMBPRINT OF SIGNER #2
Top of thumb here